METHOD FOR ALLOCATING LIMITED COMPONENT SUPPLY AND CAPACITY TO OPTIMIZE PRODUCTION SCHEDULING

ABSTRACT OF THE DISCLOSURE

A method and system for resource rationing which employs decision rules for the optimal allocation of supply and capacity over time that satisfy two key requirements (a) being consistent with accepted operational objectives (e.g. low inventory, short lead times, prioritized allocation of supply and capacity) and (b) allowing for the timely computation of a feasible production schedule. The method and system is generally characterized in that it is able to divide each of the priority ranked scheduled releases (Material Requirements Planning (MRP)) into "N" separate and smaller sized scheduled releases where the priority of each of the "N" releases may be equal to the priority of the original release. The "N" separate and smaller sized scheduled releases are sorted according to priority and then used to determine an optimal supply schedule for allocating resources including component supply and assembly capacity.